

Final script from "Adult Immunization Update" satellite broadcast, June 26, 2003.

Pneumococcal segment.

We're going to turn our attention now to pneumococcal polysaccharide vaccine and recommendations for its use. Estimates of the incidence of pneumococcal disease have been made from a variety of population based studies. More than 45,000 cases and more than 6,000 deaths from invasive pneumococcal disease are estimated to occur annually in the United States. And more than half of these cases occur in adults who have an indication for pneumococcal polysaccharide vaccine.

We know that after age 54, the incidence of pneumococcal disease rises steadily with increasing age. And we also know that drug resistant strains of pneumococcus are becoming more common, and are a serious problem in some areas. In some parts of the country, as many as 30% of pneumococcal isolates are resistant to penicillin. Obviously, this is a disease worth preventing.

The first 23-valent polysaccharide vaccine was licensed in 1983. The vaccine contains purified capsular polysaccharide antigen from 23 types of pneumococcus. These 23 serotypes account for 88% of bacteremic pneumococcal disease, and cross react with types causing an additional 8% of disease. The efficacy of pneumococcal vaccine has been estimated at 60%-70% against invasive disease, but appears to vary to some extent with underlying disease. Protection is less for persons with chronic illness, and against pneumococcal pneumonia. The duration of immunity is thought to be at least five years. The schedule is one dose, with selective revaccination at least 5 years after the first dose. Pneumococcal vaccine may - and should - be given at the same visit as other vaccines an adult may need, such as influenza, Td and hepatitis B vaccines. Pneumococcal vaccine should be given in a separate syringe at a separate site than other vaccines.

Millions of Americans are eligible for pneumococcal polysaccharide vaccine. Pneumococcal polysaccharide vaccine should be administered routinely to all adults 65 years of age and older. The vaccine is recommended for adults of any age with normal immune systems who have chronic illnesses, such as cardiovascular disease, pulmonary disease,

diabetes, alcoholism, cirrhosis, and cerebrospinal fluid leaks. The vaccine is also recommended for persons with cochlear implants. The vaccine is recommended for people who are immunocompromised as a result of disease, drugs such as chemotherapy or steroids, or HIV infection. Persons who do not have a functional spleen or no spleen are at very high risk of pneumococcal bacteremia and should be vaccinated. Finally, pneumococcal vaccine should be considered for persons living in special environments or social settings with an identified increased risk, such as certain Native American populations.

The most common question we receive about pneumococcal vaccine concerns revaccination. Not everyone who receives pneumococcal vaccine needs a second, or booster, dose. The basic problem is that booster doses do not boost. There is little evidence that more than one dose protects any better than just one. However, a single revaccination dose is recommended for some people, namely persons at highest risk of serious pneumococcal infection, and those who are likely to have a rapid decline in pneumococcal antibody levels.

This would include people with functional or anatomic asplenia, and persons who are immunocompromised, from disease, drugs, or because of HIV. Persons with chronic renal failure should also receive a one-time revaccination, as well as persons with nephrotic syndrome because they may have a rapid decline in antibody levels. Persons 65 years of age and older should get a single revaccination IF they received their first dose before age 65 AND it has been 5 or more years since the first dose. Adults who receive two doses prior to age 65 do not need a third.

Persons who receive their first dose at 65 years of age or older are candidates for revaccination if they later develop a condition for which revaccination is recommended AND it has been at least 5 years since their first dose. Persons 65 years of age and older whose vaccination status is unknown should be given one dose of vaccine.

Remember, revaccination is a one time event and this single revaccination should be given 5 years after the first dose. You don't have to memorize this. I know it can seem complicated, but the Immunization Action Coalition has developed a handy fact sheet. It's titled "Pneumococcal Vaccine - Who needs it and who needs it again". We will tell you how to get it on our broadcast resource web page.

Adverse reactions following pneumococcal vaccine are similar to other inactivated vaccines. Local reactions after either the first or second dose are reported in 30% to 50% of recipients. Systemic complaints like fever and myalgias are not common and severe reactions rare.

Contraindications to pneumococcal vaccine are the same as with other inactivated vaccines. A history of a severe allergic reaction to a vaccine component or following a prior dose is a contraindication. Moderate or severe acute illness is a precaution, and vaccination should be delayed until the acute illness has improved.

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